

NANOTECHNOLOGY'S THREAT TO FOOD AND AGRICULTURE

The ETC Group, an international research and advocacy organisation based in Ottawa, Canada, recently announced the publication of "Down on the Farm", the first comprehensive look at how nano-scale technologies will affect farmers, food and agriculture.

Nanotechnology refers to the manipulation of matter at the scale of atoms and molecules, where size is measured in billionths of metres and quantum physics determines how a substance behaves.

According to Hope Shand, ETC Group's Research Director: "Over the next two decades, technologies converging at the nano-scale will have a greater impact on farmers and food than farm mechanisation or the Green Revolution."

A handful of food and nutrition products containing invisible and unlabelled nano-scale additives are already on supermarket shelves. In addition, a number of pesticides containing nano-scale materials have been released in the environment and are commercially available.

Nano-scale materials exhibit different properties than the same materials at larger scales, and scientists are now finding out that nano-scale materials are generally more reactive and mobile if they enter the body. Only a few toxicological studies have been conducted.



Most of the world's largest food and beverage corporations—including Unilever, Nestlé and Kraft—are conducting research and development (R&D) on nano-scale technologies to engineer, process, package and deliver food and nutrients. Major agribusiness firms, such as Syngenta, BASF, Bayer and Monsanto, are reformulating their pesticides at the nano scale to make them more biologically active and to win new monopoly patents.

The ETC report examines a wide range of current R&D, ranging from atomically modified seeds, nanosensors for precision agriculture, plants engineered to produce metal nanoparticles, nanovaccines for farmed fish, nanobarcodes for tracking and controlling food products, and more.



"In the wake of this unparalleled natural disaster, major insurgency groups and several sovereign governments have reassured the public that man-made killing would be returned to as soon as practicable."

In October, the US Patent and Trademark Office established a new classification for nanotechnology patents, observes ETC Group. "It's ironic that a company can win a monopoly patent because their nano-scale product is recognised as novel, but food and safety regulators have yet to acknowledge the novelty of the nano scale," notes ETC Researcher Kathy Jo Wetter in North Carolina.

In 2002, ETC called for a moratorium on the commercialisation of new nano-scale materials until laboratory protocols and regulatory regimes are in place that take into account the special characteristics of these materials and until they are shown to be safe.

Accordingly, ETC recommends that all food, feed and beverage products incorporating manufactured nanoparticles be removed from the shelves and new ones be prohibited from commercialisation until companies and regulators have shown that they have taken nano-scale property changes into account.

Similarly, nano-scale formulations of agricultural products such as pesticides and fertilisers should be prohibited from environmental release until a regulatory regime specifically designed to examine these nano-scale products finds them safe.

ETC's report also puts the spotlight on the rapidly emerging field of synthetic biology—the construction of new living systems in the laboratory that can be programmed to do things that no natural organism can.

"Living machines" frequently involve the integration of living and non-living parts at the nano scale—also known as nanobiotechnology. "What if new life-forms, especially those that are designed to function autonomously in the environment, prove difficult to control or contain?" asks ETC Group.

Given the extreme risks (that even mainstream scientists are beginning to acknowledge), "Down on the Farm" calls for an immediate moratorium on laboratory experimentation and environmental release of synthetic biological materials until society can engage in a thorough analysis of the health, environmental and socioeconomic implications.

(Source: ETC Group news release, 23 November 2004, <http://www.etcgroup.org>)

... GLOBAL NEWS ...

EIGHT CORPORATIONS CONTROL OVER 70% OF THE WORLD'S MEDIA

The single most alarming fact about global media today is how few firms own and operate it. In his book, *Rich Media, Poor Democracy*, leading media authority Robert McChesney of the University of Illinois presents statistics and analysis on global and US media concentration that has ominous implications for the functioning of democracy.

As of 1999, says McChesney, only eight giant global corporations owned over 70% of global media—not just television, but newspapers, magazines, radio, satellite systems, cable, book publishing, film production and distribution, movie theatre chains, major aspects of the Internet, billboards and theme parks. These eight corporations are already capable of speaking to hundreds of millions of people on every continent on a daily and hourly basis, and they do.

The eight largest global giants are: AOL Time Warner, Disney, Fox/News Ltd, Viacom, Seagram, General Electric, Sony and Bertelsmann. The first three on this list own more than 50% of the combined total of the eight companies. And with the exception of Bertelsmann, these same corporations also dominate the US media market.

Such a degree of media concentration is not readily apparent to casual observers, since most local and even international affiliates continue to operate under other names. CNN, for example, is actually owned by AOL Time Warner, which also owns HBO, Court TV, Warner Brothers and Cinemax films, *Time* and *Fortune* magazines, among hundreds of others. Disney owns ABC television and radio networks, and such global cable TV channels as ESPN, Lifetime, A&E, History, and E! Entertainment, among hundreds of other networks and stations and various other media ventures around the world. Fox/News Ltd owns 22 US TV stations, over 130 daily newspapers around the world, 23 magazines, British Sky TV, Asian Star satellite and Latin Sky Broadcasting, among hundreds of other holdings.

In the modern world, the media have become the primary basis of public knowledge. As the adage goes, "Who controls the media controls the world".

(Source: by Jerry Mander, *Common Ground* magazine, December 2004. Jerry Mander is

co-editor, with John Cavanagh, of the newly released expanded edition of *Alternatives to Economic Globalization: A Better World is Possible*, published by Berrett-Koehler.)

STEADY RISE IN SECRECY ORDERS ON INVENTIONS

The total number of patent secrecy orders imposed on patent applications under the Invention Secrecy Act of 1951 rose slightly last year to 4,885. Most originated in previous years. There were 124 new secrecy orders added during the year.

The Invention Secrecy Act is one of two laws under which the government asserts a right to restrict the disclosure of privately generated information on national security grounds. (The other law is the Atomic Energy Act.) The constitutionality of this practice has never been tested.

While most secret inventions are produced by government contractors or with government funding, some are not. Secrecy orders imposed on private individuals or businesses who developed their idea without government sponsorship are termed "John Doe" secrecy orders.

Last year, there were 61 new "John Doe" secrecy orders, up from 51 the year before.

A tabulation of the latest statistics on invention secrecy, released under the Freedom of Information Act, is here: <http://www.fas.org/spg/othergov/invention/stats.html>.

(Source: *Secrecy News*, vol. 2004, issue no. 93, 26 October 2004, <http://www.fas.org>)

MYSTERY OF MARS ROVER'S "CAR WASH"

NASA's Mars rover *Opportunity* seems to have stumbled into something akin to a car wash that has left its solar panels much cleaner than those of its twin rover, *Spirit*. A Martian car wash would account for a series of unexpected boosts in the electrical power produced by *Opportunity*'s solar panels.

The rovers landed on Mars in January 2004, with solar cells capable of providing more than 900 watt-hours of electricity per day. *Spirit*'s output has dropped to about 400 watt-hours, partly because Martian dust has caked its solar panels. *Opportunity*'s output also declined at first—to around 500 watt-hours—but over the past six months it has regained power. Lately, its solar cells have been delivering just over 900 watt-hours.

Rover team leader Jim Erickson at NASA's Jet Propulsion Laboratory in Pasadena, California, told *New Scientist* that a process still not understood has repeatedly removed dust from the solar panels.

Whatever the process, it has taken place while *Opportunity* was parked during the Martian night. On at least four occasions over a six-month period, the rover's power output increased by up to five per cent overnight due to the removal of dust on the solar panels.

(Source: *New Scientist*, issues 2479/80, 25 December 2004–1 January 2005)



"Homeland Security's really coming down hard."

"ANOMALY" CAUSES FAILURE OF US MISSILE DEFENSE TEST

A multimillion-dollar US Missile Defense flight test failed today [15 December 2004] when the interceptor missile did not take off and the system was shut down, the Pentagon's Missile Defense Agency officials told reporters.

The failed flight test was meant to take place over the Pacific Ocean, and the target missile was successfully launched from Alaska but was not intercepted over the Pacific. An "anomaly" of unknown origin caused the interceptor to shut down automatically in its silo at the Kwajalein Test Range in the Marshall Islands, according to Richard Lehner, a spokesman for the missile agency.

The test had already been delayed four times for a number of reasons, including bad weather. The failed test cost US\$85 million and means another major setback for a Missile Defense Shield designed to thwart long-range ballistic missiles.

US President George W. Bush pledged to have part of the project in force by the end of 2004, and is expected to declare it operational despite the lack of testing.

According to Pentagon officials, the Missile Defense Agency has had five successful tests, with interceptions of target missiles five out of eight times.

But that was two years ago, and experts have since questioned the system's capabilities amidst recent failures and frequent delays of further testing.

"This is a serious setback for a program

that had not attempted a flight intercept test for two years," Philip Coyle, the Pentagon's chief weapons tester under the late President Ronald Reagan, told Reuters news agency in an email exchange.

The system is a more modest version of Reagan's "Star Wars" missile shield project from 1983.

(Source: *International Relations and Security Network, ISN Security Watch, 15 December 2004, <http://www.isn.ethz.ch/news/sw/details.cfm?id=10372>*)

CONCERNS ABOUT MENTAL HEALTH SCREENING BILL

Reports and rumours that Congress is passing mandatory mental health screening legislation have been circulating the airwaves and media outlets recently.

The Home School Legal Defense Association (HSLDA) has been watching and working behind the scenes on this issue for some time. Its concern stems from any attempt by the government to usurp the right of parents to direct the medical decisions of their children, including what medical tests their children receive and who tests them.

Unfortunately, the media reports have often been inaccurate. There is *no* mandatory mental health testing requirement being imposed upon states or local schools. However, there is still a cause for concern and a need for continued vigilance.

The Labor, Health and Human Services Appropriations Bill contains block grant money that may be used by the states for a

number of different programs at their discretion. Some critics are concerned that states will use this money to implement some form of mandatory mental testing program for all students throughout the school system. This concern stems largely from recommendations of the New Freedom Commission on Mental Health, a non-policy-making body created by President Bush in 2002 to propose ways of eliminating waste and improving efficiency and effectiveness of the mental health care delivery system. The commission went far beyond its mission and recommended that schools be used as the means for discovering mental health problems.

The commission's report does not specifically recommend screening *all* students. However, one could foresee how the recommendations in the report might lead to the mandatory screening of every child. For example, the report stresses that a major problem comes from undiagnosed children. It also suggests that "schools are in a key position to identify the mental health problems early and to provide a link to appropriate services".

Any proposal that would lead to mandatory testing is dangerous and clashes with the principles which govern a free society.

Keep in mind, this commission has no legislative or executive power. Congress legislates and the Department of Health and Human Services implements policy.

Congressman Ron Paul (R-TX-14) and others are currently working on committee report language that would require parental consent before any mental testing could occur.

HSLDA will continue to oppose attempts by the federal government or states to implement a mandatory testing system.

(Source: *Home School Legal Defense Association [HSLDA], 17 November 2004, <http://www.hslda.org/docs/news/hslda/20041/200411170.asp>*)

BILL DEFINES "POLITICAL PARANOIA" AS MENTAL ILLNESS

When the 109th Congress convenes in Washington in January, Senator Bill Frist, the first practising physician elected to the Senate since 1928, plans to file a bill that would define "political paranoia" as a mental disorder. This would pave the way for individuals who suffer from paranoid delusions regarding voter fraud, political persecution and FBI surveillance to receive Medicare reimbursement for any psychiatric treatment they receive, writes



"That's my iGod. It holds up to 5,000 downloaded hymns."

Hermione Slatkin, medical correspondent for the *Swift Report*.

Rick Smith, a spokesman for Senator Frist, says that the measure has a good chance of being passed—something that can only help a portion of the population that is suffering significant distress.

"If you're still convinced that President Bush won the election because Republicans figured out a way to hack into electronic voting machines, you've obviously got a problem," says Smith.

"If we can figure out a way to ease your suffering by getting you into therapy and onto medication, that's something that we hope the entire 109th Congress will support."

(Source: The Swift Report, January 2005, <http://swiftreport.blogs.com/news/health/>)

BE ON THE LOOKOUT FOR GOVERNMENTIUM!

A major research institution has recently announced the discovery of the heaviest chemical element yet known to science. The new element has been tentatively named "governmentium".

Governmentium has one neutron, 12 assistant neutrons, 75 deputy neutrons and 11 assistant deputy neutrons, giving it an atomic mass of 312. These 312 particles are held together by forces called "morons", which are surrounded by vast quantities of lepton-like particles called "peons".

Since governmentium has no electrons, it is inert. However, it can be detected as it impedes every reaction with which it comes into contact.

A minute amount of governmentium causes one reaction to take over four days to complete when it would normally take less than a second.

Governmentium has a normal half-life of four years; it does not decay, but instead undergoes a reorganisation in which a portion of the assistant neutrons and deputy neutrons exchanges places.

In fact, governmentium's mass will actually increase over time, since each reorganisation will cause some morons to become neutrons, forming "isodopes".

This characteristic of moron promotion leads some scientists to speculate that governmentium is formed whenever morons reach a certain quantity in concentration. This hypothetical quantity is referred to as "critical morass".

You will know it when you see it.
(Source: Internet)

NATO'S SECRET ARMIES LINKED TO TERRORISM?

At a time when experts are debating whether NATO is suited to deal with the global "war on terror", new research suggests that the alliance's own secret history has links to terrorism.

In Italy, on 3 August 1990, then Prime Minister Giulio Andreotti confirmed the existence of a secret army, code-named "Gladio" (the Latin word for "sword"), within the state. His testimony before the Senate subcommittee investigating terrorism in Italy sent shockwaves through the Italian Parliament and the public, as speculation arose that the secret army had possibly manipulated Italian politics through acts of terrorism. Andreotti revealed that the secret Gladio army had been hidden within the Defence Ministry as a subsection of the military secret service, SISMI. According to a document compiled by the Italian military secret service in 1959, the secret armies had a two-fold strategic purpose: first, to operate as a so-called "stay-behind" group in case of a Soviet invasion and to carry out a guerrilla war in occupied territories; and second, to carry out domestic operations in case of "emergency situations".

Felice Casson, an Italian judge who during his investigations into right-wing terrorism had first discovered the secret Gladio army, found that the secret army had linked up with right-wing terrorists in order to confront "emergency situations". The terrorists, supplied by the secret army, carried out bomb attacks in public places, blamed them on the Italian left and were thereafter protected from prosecution by the military secret service.

"The reason was quite simple. They were supposed to force these people, the Italian public, to turn to the state to ask for greater security. This is the political logic that lies behind all the massacres and the bombings which remain unpunished, because the state cannot convict itself or declare itself responsible for what happened," as right-wing terrorist Vincezo Vinciguerra explained the so-called "strategy of tension" to Casson.

The Italian Senate chose to be more explicit and concluded in its investigation in 2000: "Those massacres, those bombs, those military actions had been organised or promoted or supported by men inside Italian state institutions and, as has been discovered more recently, by men linked to the structures of United States intelligence."

Upon discovery of the secret armies, the European Parliament responded with harsh criticism, suspecting them to have been involved in manipulation and domestic terror operations.

Dr Daniele Ganser, senior researcher at the Centre for Security Studies at the ETH in Zurich and author of *NATO's Secret Armies*, confirms for the first time that the secret networks spread across Western Europe, including Germany, France, Spain, Portugal, Holland, Luxembourg, Belgium, Denmark, Norway, Italy, Greece and Turkey, and involved the strategic planning of Britain and the USA. The stay-behind armies were coordinated on an international level by the so-called Allied Clandestine Committee (ACC) and the Clandestine Planning Committee (CPC), linked to NATO's Supreme Headquarters Allied Powers Europe (SHAPE). And they used cover names such as "Absalon" in Denmark, "P26" in Switzerland, "ROC" in Norway and "SDRA8" in Belgium. Interestingly, large differences existed from country to country. In some nations the secret armies became a source of terror, while in others they remained a prudent precaution. In Turkey, the "Counter-Guerrilla" was involved in domestic terror and torture operations against the Kurds; and in Greece, the "LOK" took part in the 1967 military *coup d'état* to prevent a socialist government. In Spain, the secret army was used to prop up the fascist dictatorship of Franco; and in Germany, right-wing terrorists used the explosives of the secret army in the 1980 terrorist attack in Munich.

In other countries, including Denmark, Norway and Luxembourg, the secret soldiers prepared for the eventual occupation of their home country and never engaged in domestic terror or manipulation. In the context of the ongoing so-called war on terror, the Gladio data promotes the sobering insight that governments in the West have sacrificed the lives of innocent citizens and covered up acts of terrorism in order to manipulate the population. Allegations that NATO, the Pentagon, MI6, the CIA and European intelligence services have been linked to terror, *coups d'état* and torture in Europe are obviously of an extremely sensitive nature, and future research is needed in the field.

(Source: *International Relations and Security Network, ISN Security Watch, ETH Zurich, Switzerland, 15 December 2004, <http://www.isn.ethz.ch/news/sw/details.cfm?ID=10373>*)